Claims

1. A composition for cellulose suspensions, the composition comprising peroxyacetic acid or peracetic acid and hydrogen peroxide in sufficient relative concentration to reduce the necessary proportion of fluorescent whiting agent (FWA) or optical brightening agent (OBA) required to achieve the desired brightness in finished paper or paper board products formed from the cellulose suspension.

2. A composition as claimed in claim 1, wherein the composition comprises at least 12.5 weight percent peroxyacetic acid and/or peracetic acid.

3. A composition as claimed in claim 1, wherein the composition includes a polyamine or other cationic materials to facilitate reaction of the peroxyacetic acid and/or peracetic acid with cellulose fibres.

4. A composition as claimed in claim 3, wherein the polyamine or other cationic material is added to the composition in the range 1 – 20% by volume.

5. A composition as claimed in claim 1, wherein the composition comprises 15% peroxyacetic acid and 14% hydrogen peroxide.

6. A suspension for paper or paper board making, the suspension including an additive comprising a peroxyacetic and/or peracetic acid and hydrogen peroxide composition added to a cellulose fibre stock after pulping.

7. A suspension as claimed in claim 6, wherein the composition comprises at least 12.5 weight percent peroxyacetic acid and/or peracetic acid.

8. A suspension as claimed in claim 6, wherein the composition includes a polyamine or other cationic material to facilitate reaction of the peroxyacetic acid and/or peracetic acid with cellulose fibres.

9. A suspension as claimed in claim 8, wherein the polyamine or other cationic material is added to the composition in the range 1 – 20% by volume.

10. A suspension as claimed in claim 6, wherein the composition comprises 15% peroxyacetic acid and 14% hydrogen peroxide.

11. A process for preparing a suspension comprising forming a cellulose fibre pulp suspension and adding a composition of peroxyacetic acid and/or peracetic acid and hydrogen peroxide before any other additives are added to the suspension.

12. A process as claimed in claim 11, wherein the composition is added in the process when the pulp suspension has a consistency of at least 2% or greater of cellulose fibres.

13. A process as claimed in claim 11, wherein if the composition has a concentration of at least 12.5% peroxyacetic acid or peracetic acid, then the composition is added to the suspension in the proportion fifty millilitres of composition per gross tonne of cellulose fibre or dry solids in the suspension.

14. A process as claimed in claim 11, wherein seven litres of composition is added to 1 tonne of pulp suspension formed from cellulose fibres and water.

15. A process as claimed in claim 11, wherein the process allows for a process time of at least 30 minutes between adding the composition to the pulp suspension and adding any further additives such as FWA or OBA.

16. A process as claimed in claim 11, wherein the process provides for batch processing of vats of pulp suspension or continuous processing.

17. A process as claimed in claim 11, wherein the pulp suspension is calibrated at the end of a process time to determine whether the composition has been effective against a desired brightness and further composition added, if required, and/or a further period of processing time allowed.

18. A process as claimed in claim 17, wherein FWA and OBA is added to the pulp suspension at the end of the processing time or at least prior to paper or paper board forming from the pulp suspension.

19. A process as claimed in claim 11, wherein a polyamine or other cationic materials are added to the composition in the proportion 1 – 20% by volume of the composition.

20. A process as claimed in claim 11, wherein in the order of 50g to 7kg of composition per gross tonne of paper in initially added then allowed to react for a pre-determined process of time and a further 50g to 7kg of composition added per tonne of gross paper.

21. Any novel subject matter or combination including novel subject matter disclosed herein, whether or not within the scope of or relating to the same invention as any of the preceding claims.